

LUD 5256.4 DIV - JEL/NDH (09903230)

Claim 53: The method of claim 51, wherein said nucleic acid molecule is an antisense, RNA molecule.

Claim 54: The method of claim 51, wherein said nucleic acid molecule is a DNA molecule.

Claim 55: The method of claim 51, wherein said method comprises polymerase chain reaction.

Claim 56: The method of claim 51, wherein said nucleic acid molecule comprises a nucleotide sequence set forth in SEQ ID NO: 12, 14, 15, 16, 17, 18, 21, 22, 24, 25, 27 or 29.

Claim 57: The method of claim 51, comprising contacting said sample with a pair of oligonucleotide primers, said pair selected from the group consisting of (i) SEQ ID NOS: 12 and 14, (ii) SEQ ID NOS: 15 and 16, (iii) SEQ ID NOS: 17 and 18, (iv) SEQ ID NOS: 21 and 22, (v) SEQ ID NOS: 24 and 25, and (vi) SEQ ID NOS: 27 and 29.

Claim 58: The method of claim 51, wherein said sample is RNA isolated from a cell sample.

Claim 59: A method for determining if a cell contains a gene which encodes a human polypeptide which has PI3 kinase activity and a molecular weight of about 110 kilodaltons, as determined by SDS-PAGE, comprising [isolating] DNA from said cell and [contacting] isolated DNA with a labeled nucleic acid molecule which hybridizes specifically to said gene at 1M NaCl/10X Denhardt's solution/50mM Tris-HCl (pH 7.4)/10mM EDTA/0.1% SDS/100µg/ml denatured herring sperm DNA at 65°C for 16 hours followed by a wash of 2XSSC/0.1% SDS at 42°C, or a wash of 0.5XSSC/0.1% SDS at 50°C, or a wash at 0.1XSSC/0.1% SDS at 65°C, or a wash at 0.1XSSC/0.1% SDS, at 68°C and [determining hybridization as a determination of presence of said gene].

Claim 60: The method of claim 51, wherein said gene encodes a human polypeptide, the amino acid sequence of which is encoded by the nucleotide sequence set forth in SEQ ID NO: 32.

Claim 61: The method of claim 51, wherein said gene encodes a human polypeptide, the amino acid sequence of which is set forth in SEQ ID NO: 37.

REMARKS

Claims 51-61 are pending. These replace claims 39-47, 49 and 50 presented previously. Claim 48 has been cancelled, in order to expedite prosecution. It has not been cancelled out of